Serial No.: 10/806,032

Filing Date: 3/22/2004 Attorney Docket No. 100.760US03

PAGE 2

Title: ARCHITECTURE FOR SIGNAL DISTRIBUTION IN WIRELESS DATA NETWORK

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the

application:

Listing of claims:

1. (Currently Amended) An apparatus for coupling communicating wireless local area

network (WLAN) signals with between an internetworking device and a remotely located

access point using a transport network, the apparatus comprising:

an access point coupled to the transport network for communicating with an

internetworking device, the transport network further providing a power signal to power

at least some components of the access point;

the access point further comprising:

i) a wireless local area network (WLAN) access point, for receiving

wireless local area network signals from wireless computing equipment and converting

such signals to local area network compatible signals; and

ii) an access point remote converter, for receiving the local area network

compatible signals from the wireless local area network access point and converting such

signals to transport modulated format signals suitable for transmission over the transport

network.

PAGE 3

Serial No.: 10/806,032

Filing Date: 3/22/2004 Attorney Docket No. 100.760US03

Title: ARCHITECTURE FOR SIGNAL DISTRIBUTION IN WIRELESS DATA NETWORK

2. (Original) The apparatus of claim 1 wherein: the transport network is a twisted pair telephone cabling and the access point remote converter converts the local area network signals to a Digital Subscriber Line (xDSL) format.

- 3. (Currently Amended) The apparatus of claim 2 wherein the access point further comprises a power supply connected to the twisted pair cabling in order to be energized by the power signal from the transport network to supply power to at least some components of the access point.
- 4. (Original) The apparatus of claim 1 wherein: the transport network is an optical fiber network and the access point remote converter converts the local area network signals to an optical wavelength compatible with the fiber network.
- 5. (Currently Amended) The apparatus of claim 4 wherein the access point further comprises a power supply connected to the optical fiber network in order to be energized by the power signal from the optical fiber network to supply power to at least some components of the access point.
- 6. (Original) The apparatus of claim 1 further comprising: a power inserter that inserts the power signal onto the transport network.

PAGE 4

Serial No.: 10/806,032

Filing Date: 3/22/2004 Attorney Docket No. 100.760US03

Title: ARCHITECTURE FOR SIGNAL DISTRIBUTION IN WIRELESS DATA NETWORK

7. (Original) The apparatus of claim 1 further comprising: a signal coupler that couples the power signal from the transport network to the access point.

8. (Original) The apparatus of claim 1 wherein the transport network is an analog signal

transport medium.

9. (Original) The apparatus of claim 1 further comprising: a head end access point,

comprising: a head end remote bridge, connected to receive the transport modulated

format signals from the transport network, and to convert such signals to data network

compatible signals.

10. (Original) The apparatus of claim 9 wherein the access point and head end access

point use a cable modem to perform the transport modulation, conversion, and bridging

functions.

11. (Original) The apparatus of claim 9 additionally comprising a local area network hub,

for receiving the data network compatible signals from the head end remote bridge, and

forwarding such signals to the internetworking device.

12. (Currently Amended) A distribution network for coupling wireless local area network

signals between an internetworking device and a plurality of remotely located access

points that are remotely located, to provide wireless local area network service within a

Serial No.: 10/806,032

Filing Date: 3/22/2004 Attorney Docket No. 100.760US03

Title: ARCHITECTURE FOR SIGNAL DISTRIBUTION IN WIRELESS DATA NETWORK

geographic coverage area composed of microcells, the distribution network making use of available transport cabling, comprising:

- (a) [[a]] the plurality of access points, each deployed with a respective one of the microcells and furthermore, each access point being coupled to available transport cabling for communicating with an internetworking device, the available transport cabling further providing a power signal to power at least some portions of the access point, the access points each further comprising:
- i) a wireless local area network access point, for receiving wireless local area network signals from computing equipment located within the respective microcell, and converting such signals to local area network compatible signals; and
- ii) an access point remote converter, for receiving the local area network compatible signals from the wireless local area network access point and converting such signals to transport modulated format signals suitable for transmission over the available transport cabling.
- 13. (Currently Amended) A distribution network for coupling wireless local area network signals between an internetworking device and a plurality of remotely located access points that are remotely located, to provide wireless local area network service within a geographic coverage area composed of microcells, the distribution network making use of available transport cabling, comprising:
- (a) [[a]] the plurality of access points, each deployed with a respective one of the microcells and furthermore, each access point being coupled to available transport

PAGE 6

Serial No.: 10/806,032

Filing Date: 3/22/2004 Attorney Docket No. 100.760US03

Title: ARCHITECTURE FOR SIGNAL DISTRIBUTION IN WIRELESS DATA NETWORK

cabling for communicating with an internetworking device, the available transport cabling further providing a power signal to power at least some portions of the access point, the access points each further comprising:

- i) a wireless local area network access point, for receiving wireless local area network signals from computing equipment located within the respective microcell, and converting such signals to local area network compatible signals; and
- ii) an access point remote converter, for receiving the local area network compatible signals from the wireless local area network access point and converting such signals to transport modulated format signals suitable for transmission over the available transport cabling; and
 - (b) a head end access point, comprising:

a head end remote bridge, connected to receive the transport modulated format signals from the transport cabling, and to convert such signals to local area network compatible signals.